## Technical data CamTest

<table>
<thead>
<tr>
<th>CamTest R&amp;D</th>
<th>CamTest MTF</th>
<th>CamTest Focus</th>
<th>CamTest Chart</th>
<th>CamTest Spectral</th>
<th>CamTest Smart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field of view</strong></td>
<td>Up to ±90° (up to ±110° after individual clarification)</td>
<td>Up to ±70° diagonal field of view (up to ±90° after individual clarification)</td>
<td>Up to ±70° diagonal field of view (up to ±90° after individual clarification)</td>
<td>Up to ±35° diagonal field of view (up to ±50° after individual clarification)</td>
<td>Up to ±70° diagonal field of view (up to ±80° after individual clarification)</td>
</tr>
<tr>
<td><strong>Standard illumination wavelength</strong> (others on request)</td>
<td>White LED with PE-Filter</td>
<td>White LED</td>
<td>White LED colour temperature 6500 K</td>
<td>Backlit LED green narrow spectrum</td>
<td>Adjustable spectrum 420 nm ... 780 nm</td>
</tr>
<tr>
<td><strong>Sample EFL (Effective Focal Length)</strong></td>
<td>1.8 mm ... 16 mm</td>
<td>1 mm ... 12 mm</td>
<td>1.8 mm ... 12 mm</td>
<td>1 mm ... 12 mm</td>
<td>1 mm ... 12 mm</td>
</tr>
<tr>
<td><strong>Object distance</strong></td>
<td>0.5 m to infinity</td>
<td>Infinity</td>
<td>1000 mm ... infinity</td>
<td>Finite / infinite</td>
<td>1000 mm ... infinity</td>
</tr>
<tr>
<td><strong>Typ. measurement time</strong></td>
<td>2 s ... 1 min (Depending on the number of different parameters to be measured)</td>
<td>&lt; 2 s</td>
<td>&lt; 15 s</td>
<td>&lt; 5 s</td>
<td>&lt; 5 s particle &amp; defect pixel, &lt; 5 s shading, &lt; 10 s OECF, &lt; 15 s spectral response</td>
</tr>
<tr>
<td><strong>Sample diameter / Free aperture</strong></td>
<td>n.a.</td>
<td>n.a. / &lt; 5 mm</td>
<td>n.a. / &lt; 5 mm</td>
<td>n.a. / &lt; 5 mm</td>
<td>2 mm ... 20 mm / n.a.</td>
</tr>
<tr>
<td><strong>Camera interface</strong></td>
<td>Software Development Kit provided enabling to connect customer camera with own framegrabber to all standard interfaces (either MIPI, analog or directly to e.g. USB, FireWire, CamLink, GigE).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) EFL outside the specified ranges possible, after testing the lens characteristics
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<tr>
<td><strong>Type</strong></td>
<td>Stand alone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions (h x w x d)</strong></td>
<td>2,000 mm x 800 mm x 1,500 mm</td>
<td>2,150 mm x 1,120 mm x 875 mm</td>
<td>2,159 mm x 1,740 mm x 1,226 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight (approx.)</strong></td>
<td>300 kg</td>
<td></td>
<td>Up to 350 kg</td>
<td>750 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td>max. 1300 W</td>
<td></td>
<td>typ. 100 W ... 500 W</td>
<td>300 W ... 1000 W</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td></td>
<td></td>
<td></td>
<td>100 ... 130 VAC or 220 ... 230 VAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compressed air</strong></td>
<td></td>
<td></td>
<td></td>
<td>5 bar ... 7 bar (optional for sample fixation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>External Communication Interface</strong></td>
<td>TCP - IP</td>
<td></td>
<td></td>
<td>TCP - IP OPC - UA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature range</td>
<td>-40°C to +120°C</td>
</tr>
<tr>
<td>Temperature accuracy temporal</td>
<td>±0.3°C to ±1°C</td>
</tr>
<tr>
<td>Temperature change speed</td>
<td>4°C/min</td>
</tr>
<tr>
<td>Weight</td>
<td>300 kg</td>
</tr>
<tr>
<td>Outer dimensions (h x w x d)</td>
<td>1900 x 954 x 780 mm³</td>
</tr>
<tr>
<td>Inner dimensions (h x w x d)</td>
<td>400 x 400 x 320 mm³</td>
</tr>
<tr>
<td>Window size</td>
<td>Ø 200 mm</td>
</tr>
</tbody>
</table>